

# Kemfloor MS/EP Thermodry

Heavy Duty, Thermal Insulation Epoxy Resin Mortar Floor Screed

Description	<b>Kemfloor MS/EP Thermodry</b> is a solvent-free 3-pack components high-performance epoxy mortar screed, for extremely high strength and exceptional thermal & chemical resistance floor topping.
Where to use	<ul style="list-style-type: none"> <li>• It provides an extremely high-strength floor topping with exceptional resistance to abrasion from mechanical wear and chemical spillage, which is impervious, and at the same time produces a safe non-slips finish for personal traffic. It contains Nano; micro-sized thermal insulating technology that blocks heat transfer.</li> </ul>
Advantages	<ul style="list-style-type: none"> <li>• Solvent-free, no fire risk.</li> <li>• Impermeable to water.</li> <li>• Excellent adhesion to concrete, mortar, and steel substrate.</li> <li>• Anti-slip, anti-skid finish.</li> <li>• High mechanical strengths.</li> <li>• High chemical resistance</li> <li>• Thermal resistant.</li> </ul>
<b>Properties</b>	
Color	Natural
Solids by Volume	≈100 %
Specific Gravity	2.0 ±0.1
Pot life @ 23 °C	45 Min (reduced at a higher temperature)
Fully Cured	7 Days
Compressive strength (7 days)	40 - 60 N/mm <sup>2</sup>
Flexural strength	20 -21 N/mm <sup>2</sup>
Impact	2.5 N.m
Tensile Strength	6 - 8 N/mm <sup>2</sup>
Thermal Conductivity	0.039 W/m °C
Initial cure	24 hours at 23 °C

Surface Preparation	<p><b>New poured concrete</b></p> <ul style="list-style-type: none"> <li>Concrete compressive strength &gt;25 N/mm<sup>2</sup> &amp; Bond strength &gt; 1.5 N/mm<sup>2</sup> (28 days)</li> <li>Moisture content &lt; 4%</li> <li>Allow to fully cure 28 days prior to application.</li> <li>Remove any curing membrane by sanding or etching with a strong detergent.</li> </ul> <p><b>Old concrete</b></p> <ul style="list-style-type: none"> <li>Thoroughly clean surface with a grease- cutting detergent to remove grease and oils, and remove any loose or unsound concrete by chipping, scarifying, shot blasting, sanding or grinding. Proceed as for newly poured concrete.</li> </ul> <p><b>Previously coated concrete</b></p> <ul style="list-style-type: none"> <li>Remove any peeling or degraded paint by sanding or using a paint stripper.</li> <li>For intact paint, thoroughly clean the surface with a strong detergent, then lightly sand to remove any gloss.</li> <li>Treat any areas worn down to the original concrete as bare concrete.</li> <li>All damaged areas, cracks and surface irregularities must be repaired and smoothed first by using <b>Kemrepair EP</b> and a bonding layer using <b>Kembond EP</b>.</li> </ul> <p><b>steel surface</b></p> <ul style="list-style-type: none"> <li>The steel surface should be blasted to Sa 2½ surface quality to remove rust and mill scale.</li> </ul> <p><b>Never bridge an expansion, contraction, or construction joint.</b></p>
	<p><b>Mixing</b></p> <ul style="list-style-type: none"> <li>Stir the contents of part A with an electrical stirrer to disperse any settlement.</li> <li>Add part B to part A and mix for 2 - 3 minutes with a low-speed drill.</li> <li>Add the mix (A+B) completely to the filler (C).</li> <li>Mechanical mixing is recommended until a homogeneous and uniformly moist mix is obtained.</li> </ul>
Priming	<ul style="list-style-type: none"> <li>Prime the prepared concrete substrate using <b>Sealer E45</b> (surface sealer) as a sealer coat at coverage rate 0.2 – 0.25 Kg/m<sup>2</sup></li> <li>Mix components A and B together using a paint stirrer, pallet knife or similar until it is streak free</li> <li>Using a paint brush or medium pile paint roller, apply the mixed primer to the prepared substrate</li> <li>If the concrete absorbs the primer, leaving the surface matt instead of glossy, the surface should be re-primed</li> <li>For green concrete or wet concrete (moisture (content &gt;4% use <b>Wetseal</b> at a coverage rate of 0.2 - 0.25 Kg/m<sup>2</sup></li> <li>Ensure the mixing equipment is working and that a backup mixer is available in case of a breakdown</li> <li>When using electrically powered mixing equipment verify the security of the power supply</li> </ul>
Application	<ul style="list-style-type: none"> <li>Application temperature +10/+30 °C</li> <li>Moisture content &lt;4%</li> <li>Before the bonding layer cures apply the mortar screed.</li> <li><b>Kemfloor MS</b> should be spread to uniform thickness on the primed surface by the edge of a steel trowel.</li> <li>The material should be stamped with a wooden float to ensure complete compaction and finally finished to a closed even texture using a steel trowel.</li> </ul>
Theoretical coverage	<p><b>1<sup>st</sup> step</b></p> <p>Primer Sealer E45 for dry concrete and (Wetseal) for green concrete at coverage rate as primer coat 0.2-0.25 Kg/m<sup>2</sup> depending on substrate porosity.</p> <p><b>2<sup>nd</sup> step</b></p> <ul style="list-style-type: none"> <li>Mortar screed <b>Kemcrete MS EP Thermody</b> (A+B+C) 8 Kg/m<sup>2</sup> 4 mm thick.</li> </ul>
Packaging	35 Kg Sacks 3 Parts (A+B+C)

Shelf life & Storage	12 months if kept in original packing in a dry condition
Precaution	<ul style="list-style-type: none"> <li>• Expansion joints in the existing substrate should be continued through <b>Kemfloor MS/ EP Thermody</b> and filled to the required level with a suitable sealant.</li> <li>• In constantly wet areas or where a high degree of cleanliness is required <b>Kemfloor MS/EP Thermody</b> may be coated with <b>Kemfloor</b></li> <li>• To terminate at perimeters, up stands, columns and skirting extend the <b>Kemfloor MS/EP Thermody</b> to form a cove.</li> <li>• Minimum surface temperature 10 °C.</li> <li>• Maximum surface temperature 30°C.</li> <li>• Surface moisture contents &lt; 4%.</li> </ul>
Health and Safety	<ul style="list-style-type: none"> <li>• Use gloves and a breathing mask when applying.</li> <li>• Apply forced ventilation in confined spaces.</li> <li>• Skin splashes to be removed with hand cleanser, soap, and water.</li> <li>• Eye splashes are to be removed with plenty of water.</li> <li>• If ingested seek medical advice</li> </ul>
Additional Information	<p><b>PROKEM</b> provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure.</p> <p><b>PROKEM</b> designs tailor made products should there be critical application that requires specific properties rather than our main range for our customer's satisfaction.</p> <p><b>PROKEM</b> reserves the right to change the properties of its products.</p> <p>All orders are accepted subject to our current term of sale &amp; delivery.</p> <p>Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request.</p> <p><b>PROKEM</b> extends technical services to include after-sales support to assist users in the proper handling of our products.</p>